

XR-7180

Operating Instructions

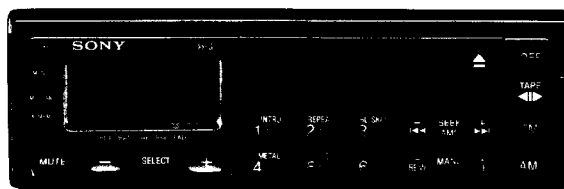
page 2

Before operating the unit, please read this manual thoroughly and retain it for future reference.

Mode d'emploi

page 18

Avant la mise en service de cet appareil, prière de lire attentivement ce mode d'emploi que l'on conservera pour toute référence ultérieure.



For installation and connections, see the supplied installation/connections manual.

Pour l'installation et les connexions, se reporter au manuel d'installation/connexions fourni.

Features	2
Precautions	3
Location and function of controls	4
Cassette deck operation	
Tape playback	8
Radio reception	
Automatic tuning	10
Manual tuning	12
Memory preset tuning	13
Maintenance	15
Specifications	16
Troubleshooting guide	17

Owner's Record

The model and the serial numbers are located on the top. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. XR-7180 Serial No. _____

Tuner section

- SSR (Sony Super Interference Rejection) PLL Synthesizer tuner
- Automatic memory function stores a total of 24 stations in memory quickly and easily.
- Memory scan function scans preset stations each for five seconds in order.
- The extended range in AM band (530-1710 kHz)

Cassette deck section

- The auto-reverse function changes the tape direction automatically.
- The C-type Dolby NR[®] system is incorporated as well as the B-type Dolby NR system.
- Intro play scans the beginning of each selection sequentially.
- Repeat play function enables the repeat play of the selection now you are listening to.
- Blank skip function automatically skips the blank portion longer than eight seconds and plays back the next selection.

General

- Slide-out security bracket allows you to take the unit away with you when you leave your car. You can also choose the fixed mounting with the supplied attachment hardware.
- You can choose an illumination color between amber and green.
- With the built-in amplifier, you can enjoy 4-speaker system.

• Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
 "DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

- If your car was parked in direct sunlight and there was a considerable rise in temperature inside the car, allow the unit to cool off before operating.
- If no power is being supplied to the unit, check the connections first. If everything is in order, check the fuse.
- If no sound comes from the speakers of a 2-speaker system, set the fader control to the center position.

If you have any question or problem concerning your unit that is not covered in this manual, please consult your nearest Sony dealer.

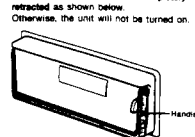
Note on Cassette Tapes

Cassette care

- Avoid touching the tape surface of a cassette, as any dirt or dust will contaminate the heads.
- Keep cassettes away from equipment with magnets such as speakers and amplifiers, as erasure or distortion on the recorded tape could occur.
- Do not expose cassettes to direct sunlight, extremely cold temperatures or moisture.

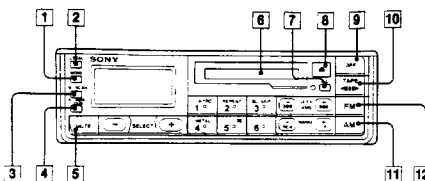
Note on cassettes longer than 90 minutes
 The use of cassettes longer than 90 minutes is not recommended except for long continuous playback.

When the unit is secured into the bracket, make sure that the handle is completely retracted as shown below.



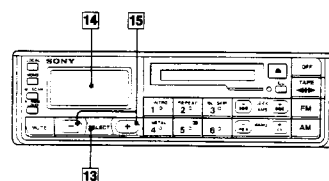
Before removing the unit from the bracket, be sure to turn the power off. If you raise up the handle to remove the unit while the unit is turned on, however, the power will be automatically turned off. This will protect speakers from being damaged.

Location and Function of Controls



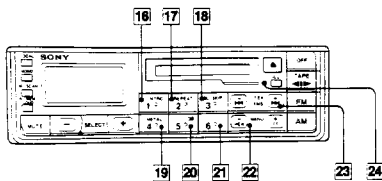
Refer to the page in ● for details.

- 1 MONO (monaural) ●
- 2 LOCAL select button ●
- 3 M.SCAN (memory scan/AMEM automatic memory) button ●
- 4 LOUD (loudness) button
Press to reinforce bass and treble especially when listening at low volume. To disengage the button, press it again.
- 5 MUTE button
Press to momentarily mute the sound. Press again to restore the same level as before.
- 6 Cassette insertion door
- 7 ILL (illumination) select button
Press to change the illumination color.
- 8 [select] button
- 9 OFF (power off) switch
Press to turn off the unit.
- 10 TAPE (playback/transport direction change) button ●
- 11 AM select button ●
- 12 FM select button ●



- 13 SELECT (control mode select) button
Press to select the desired mode: BAS (bass), TRE (treble), BAL (balance), FAD (fader), or VOL (volume).
- 14 Display window
- 15 (volume/tone/balance/fader control) button
This button normally functions as the volume control. Adjust the level within three seconds after selecting the desired control mode. Otherwise, the mode goes back to the volume control mode.

Control Mode Selection			
BAS	Bass control	For less bass	For more bass
TRE	Treble control	For less treble	For more treble
BAL	Balance control	To decrease the right speaker volume	To decrease the left speaker volume
FAD	Fader control	To decrease the rear speaker volume	To decrease the front speaker volume
VOL	Volume control	For less volume	For more volume



16	INTRO button	
17	REPEAT button	
18	BL SKIP (blank skip) button	
19	METAL button	
20	SELECT button	
21	FF/REW (fast forward/rewind) button	
22	AMS* button	
23	MANU (manual tuning) button	
24	SEEK (automatic tuning) button	

Reset button

Press this button when you use this unit for the first time and when you have changed the car battery, or when other buttons do not function.

* Automatic Music Sensor

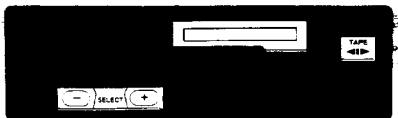
To mute the beep sound

Press **SELECT** button while pressing **SELECT**. To obtain the beep sound again, press these buttons again.

Note

Intro play, repeat play will be cancelled when you press OFF button or when you keep the ignition key set to the off position for more than eight seconds. Blank skip function will be maintained until you press BL SKIP button again.

Tape Playback



- Insert a cassette to start playback.
Press **TAPE** button when a cassette is already inserted.
- Press to adjust the volume.

Other Operations

To rewind or fast-forward the tape	
To listen to the other side of the cassette	
To take out the cassette	
To stop the tape and listen to the radio	
To play back the tape again	
To stop the tape and turn off the unit	

Press	METAL appears on the display window. To listen to the normal (TYPE I) tapes, press again.
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You can choose one illumination mode from the following two modes.

Mode 1 The parts of function selectors on the panel (OFF, TAPE, FM, AM,) and cassette insertion door illuminate when you set the ignition key to the accessory position. To enter this mode, press **only** the reset button.

Mode 2 No illumination on the panel when you set the ignition key to the accessory position. To enter this mode, press the reset button while pressing button.

In both modes, all parts of the panel illuminate when you activate the unit.
If your car has no accessory position, we recommend you to choose the Mode 2.

Press to activate B-type or C-type Dolby NR system. Select the same Dolby NR system used for the recorded cassette. Dolby NR (Noise Reduction) system reduces tape hiss noise in low-level, high-frequency signals.

To locate the beginning of the selection being played Press

To locate the next selection Press

Press First ten seconds of each selection will be played back in order from the next selection. Press again to release this function.
(during tape playback)

Press The unit goes back to the beginning of the selection when the selection ends. Press again to release this function.

Press The unit skips the long blank (more than eight seconds) automatically and plays back the next selection. Press again to release this function.

Side of the cassette being played back
This unit plays back both sides of the cassette repeatedly. The indicator on the display window shows which side of the cassette is being played back.

Indicator	Side
	The side facing upward
	The side facing downward

Automatic Tuning



- 1** Press to select the desired band, FM1, FM2, FM3 or AM.

The tuner turns on at the same time.
- 2** Press to start scanning.

For lower frequencies

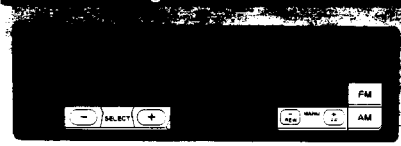
For higher frequencies

The scanning automatically stops when a station is tuned in.

Repeat this step until the desired station is tuned in.
- 3** Press to adjust the volume.

FM has three bands (FM1, FM2, FM3). Three bands cover the same frequency range. To change the band, press **FM** button.

Manual Tuning



- 1** Press to select the desired band, FM1, FM2, FM3 or AM.

The tuner turns on at the same time.
- 2** Press to select the desired station.

For lower frequencies

For higher frequencies

To change the frequency rapidly, keep the button pressed.
- 3** Press to adjust the volume.

Warning
While driving, keep your eyes on the road and use the automatic tuning or the memory preset tuning!

To stop the radio and start tape playback

When no cassette is inserted

When a cassette is already inserted

To stop the radio and turn off the unit

OFF

TAPE

LOCAL

Press

Only the stations with relatively strong signals can be tuned in.

FM 87.0

MONO

Press

The noise will be reduced. The sound will be monaural instead.

FM1 87.9

When an FM stereo program of sufficient signal strength is tuned in

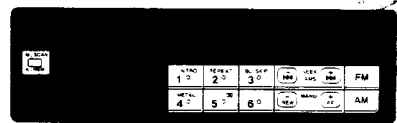
FM1 87.9

STEREO

The program is automatically received in stereo.

Memory Preset Tuning

You can memorize a total of 24 stations (6 stations for each band), one on each preset number.



- 1** Press to select the desired band, FM1, FM2, FM3 or AM.

The tuner turns on at the same time.
- 2** Press for more than two seconds.

The unit starts scanning the selected band and memorizes the tuned stations on the preset number button 1 through 6 automatically in the order of the frequency.

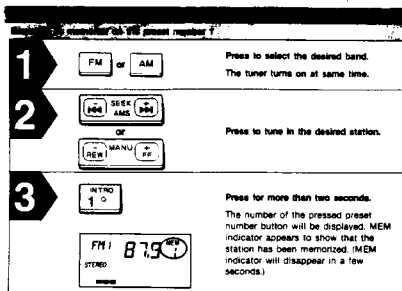
M-SCAN

Press lightly

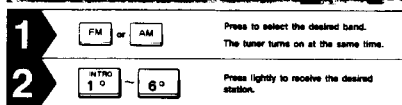
A. MEM

Each memorized station will be scanned for five seconds in order. (When the broadcast of the memorized station is too weak, it cannot be received.)

In what way are stations scanned?
The unit scans the band twice from the lowest frequency to the highest one. At first cycle, the unit scans only the stations with considerably strong signals. At the next cycle, the unit scans all the stations that can be received, including weak ones.



Repeat these steps for each preset button.



Important

Only Preset number button has only one memory for a band. The previously memorized station will be erased when you enter a new station of the same band on the same preset number button.

Specifications

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

14 watts per channel minimum continuous average power into 4 ohms, both channels driven, from 40–20,000 Hz with no more than 1% total harmonic distortion.

Power amplifier section
Outputs: Speaker outputs (four lead connectors)
Speaker impedance: 4–8 ohms
Maximum power output:
27 W + 2 (at 4 ohms)
9 W + 4 (at 8 ohms)
*Measured at 14.4 V

Cassette player section
Tape track: 4-track 2-channel stereo
Frequency response: 30–15,000 Hz

Cassette type	Dolby B	Dolby C	Dolby off
TYPE II (V)	68 dB	76 dB	56 dB
TYPE I	63 dB	73 dB	56 dB

Wow and flutter: 0.1% (W/RMS)

Tuner section
FM
Tuning range: 87.5–107.3 MHz
Antenna terminal: External antenna connector
Usable sensitivity: 12 dBf (75 ohms)
Selectivity: 75 dB at 400 kHz
Signal-to-noise ratio: 60 dB (stereo), 70 dB (mono)
Harmonic distortion at 1 kHz: 0.5% (stereo), 0.3% (mono)
Separation: 35 dB at 1 kHz
Frequency response: 30–15,000 Hz
Capture ratio: 2 dB

AM
Tuning range: 530–1,710 kHz
Antenna terminal: External antenna connector
Sensitivity: 35 dB

General
Output lead: Line output connector
Remote control output lead (for auxiliary input)
Amplifier remote control lead
Auxiliary input connector
Input lead: Remote control input lead (for auxiliary input)
Tone controls: Bass, ±10 dB at 100 Hz
Treble, ±10 dB at 10 kHz
Loudness: +10 dB at 100 Hz
-6 dB at 10 kHz

Power requirements: 12 V DC car battery (negative ground)
Dimensions (without brackets): Approx. 178 × 50 × 153 mm (7" × 2" × 6" inches)
not incl. projecting parts and controls

Mounting dimensions: Approx. 182 × 53 × 145 mm (7" × 2" × 5 7/8" inches)
not incl. projecting parts and controls

Weight: Approx. 1.8 kg (4 lb 3 oz)

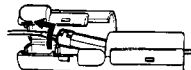
Accessory supplied: Mounting hardware (1 set)

Design and specifications subject to change without notice.

If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In this case, consult your nearest Sony dealer.

Warning

Use the specified ampere fuse. Use of a higher ampere fuse may cause serious damage.



Cleaning the Head and Tape Path

To keep the best possible sound quality, clean the metallic part of the connector at the rear of the unit periodically using a commercially available head cleaning fluid or rubbing alcohol and a cotton swab.



Cleaning the Head and Tape Path

Prolonged use may contaminate the tape head and the tape path. Contamination causes sound dropouts in playback. Clean the tape head and the tape path every two weeks to enjoy optimum hi-fi stereo sound. Use a commercially available cleaning cassette.

Troubleshooting Guide

The following check will assist in the correction of most problems which you may encounter with your unit. Before going through the check list below, first refer back to the connection and operating procedures.

Radio reception	Trouble	Cause/Remedy
Preset tuning is not possible.		- Memorize the correct frequency. - The broadcast is weak. — Use manual tuning.
Automatic tuning is not possible.		The broadcast is weak. — Use manual tuning.
The STEREO Indicator flickers.		- Tune in precisely. - The broadcast is weak. — Press the MQNO button.

Tape playback

Playback sound is distorted.	Contamination of the tape head. — Clean the head.
The AMS does not operate correctly.	- There is a noise in the space between selections. - A blank space is too short (less than 4 seconds). - FF is pressed immediately before the following selection. - REW is pressed immediately after the selection starts. - A long pause, or a passage of low frequencies or very low sound level is treated as a blank.

General

No sound	- Control the volume with the volume button. - Set the faster control to the center position on the 2-speaker system.
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